



# Product Change Notification

## 103776 - 00

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# Product Change Notification

**Change Notification #:** 103776 - 00  
**Change Title:** DISI16R2, DISI16R2JP, DISI24R2, DISI24R2JP, DISI32R2, DISI32R2JP, PCN 103776-00, FYI, Change Capacitor to Correct Regulator Instability and as a Consequence Potential DSP Failure  
**Date of Publication:** December 17, 2003

**Type of Change Notification:**  
FYI - (For Your Information)

**Key Characteristics of the Change:**  
Product Design

## Forecasted Key Milestones:

<b>Date of First Availability of Post-Conversion Material:</b>	Dec 19, 2003
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*The date of "First Availability of Post-Conversion Material" is the projected date that a customer may expect to receive the Post-Conversion Materials. This date is determined by the projected depletion of inventory at the time of the PCN publication. The depletion of inventory may be impacted by fluctuating supply and demand, therefore, although customers should be prepared to receive the Post-Converted Materials on this date, Intel will continue to ship and customers may continue to receive the pre-converted materials until the inventory has been depleted.*

## Description of Change to the Customer:

Due to the variation in the Equivalent Series Resistance (ESR) parameter of the capacitors associated with the core voltage regulators, these regulators may become unstable. The instability of the voltage regulators can cause the DSP device(s) to fail. This will render the board inoperable. This failure can occur at both board startup and at runtime. Runtime failures associated with this issue have been observed within the first 48 hours of operation.

A new, lower ESR capacitor is required in the board design to assure the core DSP voltage regulator initializes properly and runs in a reliable and stable condition.

Intel has successfully specified and tested a new capacitor with the proper characteristics, and will use this component on all future production hardware.

Affected hardware can be repaired by replacing the capacitor in the DSP circuitry with a low ESR component. This corrective action has proven fully effective in eliminating the issue.

## Customer Impact of Change and Recommended Action:

This change is a component/design enhancement.

This change has been thoroughly evaluated to ensure that it does not have any negative functional implications to our customer.

Intel requires that customers who have resold any of the affected board(s) listed provide this Product Change Notification (or the details contained herein) to the purchaser of such boards.

Intel is providing customers a hardware repair path to revise existing products in the field via the DRA process (repair and return).

### BOARDS IN STOCK

If you have these boards in stock, return them to Intel via the Direct Return Authorization (DRA) Warranty Repair process.

### DEPLOYED BOARDS

For products that have been successfully deployed for more than 48 hours and are operating normally, Intel has no reason to suspect that failures will occur and no action is required at this time. If customer preference is to return the product for upgrade, Intel will honor all requests.

To return a board for a repair:

US Distributors: Please fill out the online DRA form, mentioning "DISI Product Alert" in the problem description field, at:

<http://www.intel.com/support/motherboards/draform.htm>

Non-US Distributors: Please contact your RMA Call Center to arrange for return and repair.

Customers should modify their databases in order to place orders against the new order codes. See details below.

## Products Affected / Intel Ordering Codes:

### Board Products Table

Affected Product Code	Pre-Change MM#	Post-Change MM#
DISI16R2	851326	857629
DISI16R2	852736	857629
DISI16R2	853739	857629
DISI16R2	857629	857629
DISI16R2JP	857639	857639
DISI16R2JP	855449	857639
DISI24R2	857682	857630
DISI24R2	857630	857630
DISI24R2	855049	857630
DISI24R2	853738	857630
DISI24R2	852733	857630
DISI24R2	851593	857630
DISI24R2JP	854648	857640
DISI24R2JP	857640	857640
DISI32R2	855031	857628
DISI32R2	853740	857628
DISI32R2	849865	857628
DISI32R2	851597	857628
DISI32R2	851591	857628

<b>Affected Product Code</b>	<b>Pre-Change MM#</b>	<b>Post-Change MM#</b>
DISI32R2	852734	857628
DISI32R2	852735	857628
DISI32R2JP	854081	857641
DISI32R2JP	857641	857641

### **Reference Documents / Attachments:**

**Document:** DRA Form      **Location #:** <http://www.intel.com/support/motherboards/draform.htm>

### **PCN Revision History:**

<b>Date of Revision:</b>	<b>Revision Number:</b>	<b>Reason:</b>
December 17, 2003	00	Originally Published PCN